

May 25, 1954

Dr. Clifford W. Hesseltine
Northern Utilization Research Branch
United States Department of Agriculture
Peoria Falls, Illinois

Dear Dr. Hesseltine:

I am writing you at the instance of Dr. Robert Dittenger at Eli Lilly & Co. This fall we are planning to resume some experiments on the genetics of actinomycetes. I had carried out a few experiments with *Streptomyces griseus* a couple of years ago, but what I could do was limited by the common failing that on continued transfer the cultures tended to lose their capacity to sporulate. The sporulation is essential for the manipulations of genetic work.

I am writing to you in hopes that you may be able to offer some recommendations or, even better, some cultures with more desirable properties. These would be in the order of importance: (1) vigorous sporulation which persists as far as possible on repeated transfer, (2) vigorous, rapid growth on synthetic media preferably at higher temperatures around 37 degrees if possible, and (3), least important, distinctive pigmentation. If you can recommend any particular isolates to these purposes, I would appreciate your counsel.

This work is scheduled to be continued by Dr. S. G. Bradley who will be coming here this fall on a post-doctoral fellowship. At the present time he is at the Department of Biology at Northwestern University, Evanston, Illinois. Until next September if you could forward any promising cultures directly to him, he could get right to them. Meanwhile he is attempting to make his own isolations of cultures that would be appropriate, and any tips in this direction would also be appreciated.

Dr. Dittenger also supplied me with some formulas for media which would encourage continued sporulation. If you have any pet concoctions of your own, they would also be appreciated.

Yours sincerely,

Joshua Lederberg
Assoc. Professor of Genetics

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